

**PROPOSED KEYSTONE CONFERENCE:  
MOLECULAR MECHANISMS COMMON TO TYPES I AND II DIABETES**

**Keynote speaker - Henry Bourne G Proteins and Intracellular Signaling**

**Plenary - Genetics of Type II Diabetes Mellitus**

**G. Bell**

**I. Session: Biology of the Beta Cell I - Gene Regulation**

**D. Steiner**

1. Differentiation  
S. Efrat
2. Gene regulation  
M. German
3. Development  
S. Bonner Weir

**II. Session: Biology of the Beta Cell II - Biosynthesis and Processing**

**G. Grodsky**

1. Biosynthesis  
C. Rhodes
2. Prorelaxin and proinsulin processing  
C. Gorman
3. Amylin  
P. Westermark

**III. Session: Biology of the  $\beta$ -Cell - Pathways**

**F. Matchinski**

1. Ion channels, sulfonylureas and insulin release  
C. Boyd
2. GLUT 2 Function in the  $\beta$ -Cell -  
C. Newgard
4. GLP-1  
J. Habner

#### **IV. Session: Gene Expression in Type II Diabetes**

**D. Granner**

1. Insulin regulation of gene expression  
M. Magnusen
2. Insulin receptor mutations  
S. Taylor
3. Pima Indian model of NIDDM  
C. Bogardus

#### **V. Session: Glucose Transporter Function in Diabetes**

**P. Pilch**

1. Domains of GLUT4 that confer specialized function  
M. Meckler  
Y. Oka  
D. James
2. Role of muscle T tubule in glucose transport  
L. Dohm
3. Transgenic models of glucose transport regulation  
J. Pessin
4. Influence of oral hypoglycemic agents  
C. Hoffman

#### **VI. Session: Hormone and Lymphokine Action I**

**R. Roth**

1. Antigen receptor and tyrosine kinase mediating lymphocyte activation  
R. Klausner
2. Role of IRS-1 in insulin receptor signaling  
M. White
3. CD45 phosphatase in signal transduction  
A. Weiss

## **VII. Session: Early Events in Hormone and Lymphokine Action II**

**R. Kahn**

1. Receptor co-stimulation and the anergic response  
R. Schwartz
2. Insulin receptor signaling circuits  
M. Czech
3. Protein kinase cascades in insulin actions  
J. Avruch

Mechanisms of IL2 transcriptional regulation  
G. Crabtree

## **VIII. Session: GTP-binding Proteins in Signal Transmission**

**J. Exton**

1. p21 RAS regulation  
F. McCormick
2. ras in T lymphocyte activation  
P. Downward
3. G-proteins in the beta cell  
A. Spiegel

## **Workshop I: Insulin Resistance**

J. Flier  
G. Reaven

## **Workshop II: Insulin Receptor $\alpha$ Subunit Function**

C. Yip  
P. De Meyts